CLAIMS

WHAT IS CLAIMED IS:

1. A medical article comprising an implantable substrate having a coating, the coating comprising a first biologically erodable polymer having the glass transition temperature below about –50°C.

2. The medical article of Claim 1, wherein the first polymer includes poly(esters).

3. The medical article of Claim 1, wherein the first polymer is poly(caprolactone).

4. The medical article of Claim 1, wherein the first polymer is selected from a group consisting of poly(4-hydroxybutyrate), poly(3-hydroxyvalerate), poly(3-hydroxybutyrate-co-3-hydroxyvalerate), and mixtures thereof.

5. The medical article of Claim 1, additionally including a biologically erodable polymeric additive mixed with the first polymer, wherein the additive is a polymer having the glass transition temperature of about –50°C or greater.

6. The medical article of Claim 1, wherein the additive is a polymer having the glass transition temperature between about –50°C and about 80°C.

7. The medical article of Claim 1, wherein the additive is a polymer having the glass transition temperature between about –20°C and about 40°C.

8. The medical article of Claim 1, wherein the additive is a polymer having the glass transition temperature between about 0°C and about 20°C.

9. The medical article of Claim 1, additionally including a biologically erodable polymeric additive mixed with the first polymer, wherein the additive is a polymer having a degree of crystallinity greater than that of the first polymer.

10. The medical article of Claim 1, additionally including a biologically erodable polymeric additive mixed with the first polymer, wherein the additive is selected from a group consisting of poly(3-hydroxybutyrate), poly(L-lactide), poly(D,L-lactide), poly(L-lactide-co-D,L-lactide), poly(glycolide), poly(glycolide-co-L-lactide), poly(glycolide-co-D,L-lactide), poly(caprolactone-co-L-lactide), poly(caprolactone-co-D,L-lactide), poly(trimethylene carbonate), copolymers of trimethylenecarbonate, poly(orthoesters), tyrosine derived poly(carbonates), poly(iminocarbonates), poly(ester-amides), and mixtures thereof.

11. The medical article of Claim 1, wherein the medical article is a stent.

12. The medical article of Claim 1, wherein the mass ratio between the first polymer and the polymeric additive is between about 9:1 and about 0.16:1.

13. The medical article of Claim 1, wherein the mass ratio between the first polymer and the polymeric additive is between about 6:1 and about 0.25:1.

14. The medical article of Claim 1, wherein the mass ratio between the first polymer and the polymeric additive is between about 3:1 and about 0.33:1.

15. The medical article of Claim 1, wherein the coating additionally comprises a therapeutic substance.

16. The medical article of Claim 1, wherein the coating is a topcoat layer disposed over a drug reservoir layer for reducing the rate of release of a drug from the reservoir layer.

17. A method for fabricating a medical article, the method including depositing a coating on at least a portion of an implantable substrate, the coating including a first biologically erodable polymer having the glass transition temperature below about –50°C.

18. The method of Claim 17, wherein the first polymer includes poly(esters).

19. The method of Claim 17, wherein the first polymer includes poly(esters).

20. The method of Claim 17, wherein the first polymer is poly(caprolactone).

21. The medical article of Claim 1, wherein the first polymer is selected from a group consisting of poly(4-hydroxybutyrate), poly(3-hydroxyvalerate), poly(3-hydroxybutyrate-co-3-hydroxyvalerate), and mixtures thereof.

22. The method of Claim 17, additionally mixing a biologically erodable polymeric additive mixed with the first polymer, wherein the additive is a polymer having the glass transition temperature of about –50°C or greater.

23. The method of Claim 17, wherein the additive is a polymer having the glass transition temperature between about –50°C and about 80°C.

24. The method of Claim 17, wherein the additive is a polymer having the glass transition temperature between about –20°C and about 40°C.

25. The method of Claim 17, wherein the additive is a polymer having the glass transition temperature between about 0°C and about 20°C.

26. The method of Claim 17, additionally mixing a biologically erodable polymeric additive mixed with the first polymer, wherein the additive is a polymer having a degree of crystallinity greater than that of the first polymer.

27. The method of Claim 17, additionally mixing a biologically erodable polymeric additive mixed with the first polymer, wherein the additive is selected from a group consisting of poly(3-hydroxybutyrate), poly(L-lactide), poly(D,L-lactide), poly(L-lactide-co-D,L-lactide), poly(glycolide), poly(glycolide-co-L-lactide), poly(glycolide-co-D,L-lactide), poly(caprolactone-co-L-lactide), poly(caprolactone-co-D,L-lactide), poly(trimethylene carbonate), copolymers of trimethylenecarbonate, poly(orthoesters), tyrosine derived poly(carbonates), poly(iminocarbonates), poly(ester-amides), and mixtures thereof.

28. The method of Claim 17, wherein the medical article is a stent.

29. The medical article of Claim 17, wherein the mass ratio between the first polymer and the polymeric additive is between about 9:1 and about 0.16:1.

30. The method of Claim 17, wherein the mass ratio between the first polymer and the polymeric additive is between about 6:1 and about 0.25:1.

31. The method of Claim 17, wherein the mass ratio between the first polymer and the polymeric additive is between about 3:1 and about 0.33:1.

32. The method of Claim 17, wherein the coating additionally including incorporating a therapeutic substance in the coating.